

10/531114  
JC12 Rec'd PCT/PRS 11 APR 2005

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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NUMBER EIK-0003 SERIAL NUMBER \_\_\_\_\_ FILED \_\_\_\_\_  
FIRST INVENTOR: Hemmerling TITLE METHOD AND MICROORGANISM FOR THE  
PRODUCTION OF D-MANNITOL

EXAMINER \_\_\_\_\_ ART UNIT \_\_\_\_\_

1.  Applicant submits herewith a copy of (a) attached form PTO-1449, which lists all patents, publications, applications, or other information submitted for consideration by the Office; (b) a legible copy of each document required by 37 C.F.R. §1.98(b)(2).
2.  Applicant herein apprises the Patent Office of references cited in a parent U.S. application from which this application obtains the benefit of an earlier filing date under 35 U.S.C. §120. The Serial Number of the parent application is U.S. Application \_\_\_\_\_ filed \_\_\_\_\_ and entitled \_\_\_\_\_. The publications cited therein are listed on attached Form PTO-1449. In accordance with 37 C.F.R. §1.98(d) copies of the listed publications are not required.  Additional parent patent applications are listed on an attached sheet.
3.  In accordance with 37 C.F.R. §1.98(a)(3), Applicant hereby certifies that for each reference not in English (check at least one box below):  
 A copy of a translation of one or more non-English document, or portion thereof, is provided herewith;  
 A concise explanation is (check at least one box below):  
 provided in the accompanying foreign or international search report;  incorporated into the specification; and/or  provided herewith.

**37 C.F.R. §1.97(b)(1), (b)(2) – WITHIN 3 MONTHS OF FILING OR ENTRY IN NATIONAL STAGE**

4.  Since this Information Disclosure Statement is being filed within three months of the filing date of the subject application or within three months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application, no fee or certification under 37 C.F.R. §1.97(e) is required.

**37 C.F.R. §1.97(b)(3), (b)(4) – PRIOR TO MAILING OF FIRST OFFICE ACTION OR FIRST ACTION AFTER REQUEST FOR CONTINUED EXAMINATION**

5.  Since this Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, or before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. §1.114, no fee or certification under 37 C.F.R. §1.97(e) is required.

**37 C.F.R. §1.97(c) – AFTER FIRST ACTION, BEFORE FINAL ACTION OR ALLOWANCE**

6.  Since this Information Disclosure Statement is being filed outside of the period provided for in 37 C.F.R. §1.97(b), but before the mailing date of a Final Rejection or Notice of Allowance, this submission is being accompanied by (one of the following boxes must be checked):
  - a.  the fee required under 37 C.F.R. §1.97(c)(2) and specified in 37 C.F.R. §1.17(p).
  - b.  the statement specified in 37 C.F.R. §1.97(e) (Box 8 or 9 must be checked).

**37 C.F.R. §1.97(d) – AFTER FINAL REJECTION OR ALLOWANCE**

7.  Since this Information Disclosure Statement is being filed after the period specified in 37 C.F.R. §1.97(c), but on or before payment of the issue fee and is accompanied by both the statement specified in 37 C.F.R. §1.97(e) and the fee set forth in 37 C.F.R. §1.17(p). (Box 8 or 9 must be checked.)
8.  In accordance with 37 C.F.R. §1.97(e)(1), Applicant's attorney certifies that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.  The foreign or international search report(s) is/are enclosed.
9.  In accordance with 37 C.F.R. §1.97(e)(2), Applicant's attorney certifies that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of the information disclosure statement.
10.  In the event the Commissioner of Patents deems that any additional fee is required under 37 C.F.R. §§ 1.16 or 1.17 in connection with this application, Applicant's attorneys authorize that such fee be charged to Deposit Account No. 06-1130.

11. Consideration of this Information Disclosure Statement is respectfully requested.

Name:	<u>Michelle J. Young</u>	Registration Number:	<u>43,299</u>
Signature:	<u>Michelle J. Young</u>		
Date:	<u>April 11, 2005</u>		

**CERTIFICATE OF MAILING OR TRANSMISSION:** I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or [ ] facsimile transmitted to the U.S. Patent and Trademark Office to Facsimile No. \_\_\_\_\_ on the date shown below.

Name:		
Signature:		Date:



INFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)

Docket Number (Optional) EIK-0003	Application Number 10/531114
Applicant(s) JC12 Rec'd PCT/PTC 11 APR 2005 Claudia Hemmerling et al.	
Filing Date	Group Art Unit

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	JP 10-23896	01/27/1998	Japan				
	WO 00/04181	01/27/2000	PCT				
	WO 02/50296	06/27/2002	PCT				
	WO 03/095635	11/20/2003	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		International Search Report for Application No. PCT/EP03/11191 dated 02/17/2004
		Aarnikunnas, J., et al., "The mannitol dehydrogenase gene (mdh) from Leuconostoc mesenteroides is distinct from other known bacterial mdh genes"; Appin Microbiol Biotechnol (2002) 59: 665-671

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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(Use several sheets if necessary)

Docket Number (Optional)  
EIK-0003

Application Number

10/531114

Applicant(s) 10/531114  
Claudia Hemmerling et al.

Filing Date

Group Art Unit

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Barnell, Wendy O., et al.; "Sequence and Genetic Organization of a Zymomonas mobilis Gene Cluster That Encodes Several Enzymes of Glucose Metabolism"; Journal of Bacteriology, Dec. 1990, p. 7227-7240
	Brunker, Peter, et al.; "Cloning, nucleotide sequence and expression of a mannitol dehydrogenase gene from Pseudomonas fluorescens DSM 50106 in Escherichia coli"; Biochimica et Biophysica Acta 1351 (1997) 157-167
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	Grobben, Gert J., et al.; "Spontaneous Formation of a Mannitol-Producing Variant of Leuconostoc pseudomesenteroides Grown in the Presence of Fructose"; Applied and Environmental Microbiology, June 2001, p. 2867-2870
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	Kaup, B., et al.; "Metabolic engineering of Escherichia coli: construction of an efficient biocatalyst for d-mannitol formation in a whole-cell biotransformation"; Applied Microbiology and Biotechnology (E-Pub ahead of print), 'Online! 28 October 2003 (2003-10-28), XP002268517 Retrieved from the Internet: <URL: <a href="http://www.springerlink.com/app/home/main.asp?wasp=2pwgplqtqh76181kvrt0">http://www.springerlink.com/app/home/main.asp?wasp=2pwgplqtqh76181kvrt0</a> > 'retrieved on 2004-01-27!
	Kornberg, Hans L, et al.; "Facilitated diffusion of fructose via the phosphoenolpyruvate/glucose phosphotransferase system of Escherichia coli"; PNAS; February 15, 2000; Vol. 97; No. 4; pgs 1808-1812
	Parker, Corrine, et al.; "Characterization of the Zymomonas mobilis glucose facilitator gene product (glf) in recombinant Escherichia coli: examination of transport mechanism, kinetics and the role of glucokinase in glucose transport"; Molecular Microbiology (1995) 15(5), 795-802
	Slatner, Matthias, et al.; "Enzymatic Production of Pure D-Mannitol at High Productivity"; Bioanalysis and Biotransformation, Vol. 16, 1998, pp. 351-363
	Wisselink, H.W., et al.; "Mannitol production by lactic acid bacteria: a review"; International Dairy Journal 12 (2002) 151-161

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